

# USCMS Engineer Status Report for June 2003

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## 1 Work Performed This Month

IGUANA:

- o) CHEP03 paper has been written and submitted: <http://iguana.web.cern.ch/iguana/docs/pres03-24-chep03-iguana/paper/iguana-arch-fram-tool.ps>

- o) Plan for 2004 has been discussed and the document has been started.

ORCA Visualisation:

- o) Particle names added to the text info table.

- o) Event update bug related to update of 3D representations of invisible, but reconstructed objects has been fixed;

- o) Tracker sim hits cubic shape has been fixed;

- o) All assertion failures eliminated;

- o) Gammas added to visualised sim tracks;

- o) Configuration (.orcrc) service has been added to the menu. Updates of the .orcrc configurables work for the next event.

- o) Calorimetry hits iterator updated to the new style.

In more details:

- oo) Calorimetry visualisation:

- \* calohit iterators changed to new style;

- \* VisCaloDataProxy.cc: Update every twig after it is instantiated: it sets STRUCTURE\_MASK to prevent automatic reconstruction.

- oo) CobraVisBase:

- \* EventDataProxy.cc: Update event twig after it is instantiated.

- \* EventObserverTwig.cc: Fixed update of invisible event objects.

- oo) CobraVisMain:

- \* BuildFile, CobraVisMain.cc: IgQtConfigService added and loaded.

- oo) Geant3 detector visualisation:
  - \* VisG3DetDataProxy.cc: Update every twig after it has been instantiated.
- oo) Configuration service (IgQtConfigService):
  - \* BuildFile: Export the library.
  - \* IgQtConfigService.cc: Rename the service to be a COBRA service, fix its appearance before Debug menu.
- oo) Muon visualisation:
  - \* VisMuDataProxy.cc: Update every twig after it's been instantiated.
- oo) Tracker visualisation:
  - \* BuildFile: Use DDCore and Particle libraries.
  - \* VisTkEventDataProxy.cc: Update every twig with STRUCTURE\_MASK.
  - \* VisTkSimTracksTwig.cc: Add particle name in the text table. Visualise gammas as dashed yellow lines. Build a particle decay tree.
  - \* GeantEvent.h, GeantEvent.cc: New files - decay tree prototype.

## 2 Plans For Next Month

- o) Particle decay tree: implement as a twig tree with separate selection and visibility control for each of the tracks. It should be updated (recreated) for every new event.